**Local and Regional Procurement Learning Alliance**

**Technical Guidance Sheet: Collecting Price Data**

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**DRAFT**

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1. **Overview:**

USDA’s Local and Regional Procurement Pilot Project (PPP) and USAID’s Annual Program Statement Emergency Food Security Program for vouchers, cash, and local and regional procurement (LRP) require that country offices collect commodity price data from several different market locations throughout the duration of the pilots/programs.

The overarching objective of this document is to assist country offices to collect high quality and consistent price data. Subsidiary objectives of this document are to (1) define relevant terms, (2) help country offices identify available and complementary secondary commodity price data sources, (3) explain how to identify additional data that may need to be collected, and (4) explain how to regularly collect price data required by USAID and USDA. This sheet should assist country offices in determining which markets, which prices, and which commodities to monitor.

This document has been written to cover all USDA and USAID cash, voucher, and LRP programs. Some country offices will likely need to collect less data than what is described below.

Users of the technical guidance sheets are encouraged to read the sheets sequentially. Each sheet builds upon information developed in the prior sheet. Readers are also encouraged to review the powerpoint presentations that are complementary with each guidance sheet. The complementary powerpoints are listed below the relevant guidance sheets. The technical guidance sheets and powerpoints cover the following topics:

1. Guidance sheet #1: Relevant terms and definitions (begins on page 4)
   1. 1. Introduction to LRP.ppt
   2. 2. Global Framework Overview.ppt
   3. 3. Introduction to Markets.ppt
   4. 4. Introduction to Prices.ppt
   5. 5. Market Data – Terms and Definitions.ppt
2. Guidance sheet #2: Assessing available secondary price data (begins on page 10)
   1. 6. Market Data – Assessing Secondary Data.ppt
3. Guidance sheet #3: Identifying additional primary price data to collect (begins on page 16)
   1. 7. Market Data – Market Selection.ppt
   2. 8. Market Data – Trader Selection.ppt (slides 1- 9)
4. Guidance sheet #4: Collecting primary price data (begins on page 28)
   1. 8. Market Data – Trader Selection.ppt (continued)
   2. 9. Market Data – Data Quality Control.ppt
5. Two additional documents:
   1. LRP Price Survey\_Registration.docx
      1. For use during the first interview with each trader
   2. LRP Price Survey\_Post Registration.docx
      1. For use during follow up surveys

Where possible, country offices are encouraged to use secondary price data in order to save time and resources and to ensure data comparability over time. Most country offices will need to supplement already available secondary data with primary data related to specific commodities, traders, or markets relevant to their programs. As much as possible, we will want to replicate the secondary data collection method in any new price data collection so as to enhance comparability and integrability of primary and secondary data (e.g., if the national CPI series buys a specific type of maize the second week of the month in 10 kg lots, check prices at the same scale/time/level).

Price data collection needs to be consistent and precise. Gathering information from the right markets, on the right prices, from the right traders, and for the right commodities will ensure data consistency across time within a pilot and across pilots. Well-collected data can also be interpreted with greater confidence than can data haphazardly collected. At a minimum, price data collection should be collected monthly, beginning one month prior to procurement and ending one month after the last distribution. Price data can be collected more frequently as well; a country office may choose to do so based on its capacity, the number of markets to track, and the availability and frequency of secondary data.

Milestones:

* Understand terms and definitions
* Identify and assess secondary data
* Determine how many markets to monitor
* Select markets to monitor
* Compare secondary data with markets that require monitoring and identify where primary data collection will be necessary
* Understand how to select traders within markets and how to collect prices
* Practice survey in a market that will not be monitored
* Begin primary price data collection
* Register markets
* Select traders within markets requiring primary data collection

Outcomes after working through the guidance sheets and powerpoints:

* Each CO should have an understanding of what markets they should monitor. Some country offices will already have identified the markets to monitor
* Each CO should be able to identify and assess secondary data sources for food price time series for their country
* At least one CO staffer should be comfortable with how to train field staff on data collection approaches
* At least one CO staffer should be comfortable with how to verify that the data are correct
* Future technical guidance will present how to interpret price changes and when to request assistance on analyzing prices

**Sheet 1: Relevant terms and definitions**

1. **Competitive and non-competitive procurement**

Procurement strategies vary across and within pilots.

* 1. Some pilots use *competitive* tendering, in which traders submit blind bids to the procuring agency.
  2. Others use *limited-competitive* tendering from targeted groups. Tenders or purchases are targeted to or limited to certain suppliers (typically smallholder farmers or specific geographic areas). If helping the development of suppliers is a secondary objective of procurement, we refer to that procurement as “limited-competitive.”
  3. Some pilots use *non-competitive* procurement. Purchases are negotiated with a specific supplier or a few specific suppliers, primarily because there is limited choice (e.g., only one or two processors can fortify commodities or process commodities to the agency’s specifications).
  4. Some pilots distribute *commodity-denominated vouchers***.** Beneficiaries receive coupons redeemable directly from vendors for a fixed amount of specific commodities.
  5. Some pilots use *cash-denominated vouchers.* Beneficiaries receive coupons redeemable for a fixed value of commodities directly from vendors (may be restricted to allowable set of commodities).
  6. USAID pilots may use *cash transfers*. Beneficiaries receive cash to purchase commodities directly from vendors.

1. **In-depth evaluations: Counterfactuals (also known as “matches”)**
   1. Not all pilots can or need to be matched to non-pilot communities. Each country office should already be aware of whether it will be using matches or not.
   2. Some pilot source and recipient communities can be paired with communities not participating in the pilot. Non-pilot communities are “matched” to the pilot communities based on a set of common attributes (e.g., distance from a paved road or community size). We use these matches to develop *counterfactuals*, or examples of what would likely have happened in the absence of the pilot. Pilots with in-depth evaluations that utilize matches will need to collect price data both from the pilot communities and from their matches. An in-depth evaluation may have counterfactual source communities, counterfactual recipient communities, or both.
2. **Market locations**

Prices will need to be collected from some or all of the following markets:

* Global markets
* National or central markets in the source country
  + Major markets in source country
* National or central markets in the recipient country
  + Major markets in the recipient country
* Source (i.e., procurement) markets
  + Markets where procurement occurs
* Recipient (i.e., destination) markets
  + Market associated with distribution site / commodity’s destination
* Counterfactual source markets, where appropriate
* Counterfactual recipient markets, where appropriate

Some overlap may occur across these market types. For example, in the cases of local procurement and voucher distribution, recipient and source country national markets will be the same. In cases of local procurement, the national or central markets in recipient and source countries will be the same (since food will be procured and distributed within the same country). In LRP pilots that procure and distribute foods within the same communities (e.g., for a school feeding program), recipient markets may also be source markets. When country offices procure competitively through a hard-tendering process, national or central markets are the only source markets that need to be monitored. In these cases, it is extremely difficult to trace hard-tendered commodities back to smaller source markets. Below, we explain how to select markets within each type to monitor.

**Number of Markets to Monitor**

|  |  |  |
| --- | --- | --- |
| **Market Type** | **Limited competitive procurement** | **Competitive and noncompetitive procurement, vouchers and cash:** |
| **National or central markets in source country** | **5** | **5** |
| **National or central markets in recipient country** | **5** | **5** |
| **Sample of source markets** | **≤ 5** | **None** |
| **Sample of recipient markets** | **≤ 5** | **≤ 5** |
| **Counterfactuals for source markets** | **≤ 5** | **None** |
| **Counterfactuals for recipient markets** | **≤ 5** | **≤ 5** |

1. **Trader types and prices**

Along a commodity supply chain, each trader will buy and sell at different prices. Wholesale prices and retail prices for each commodity need to be collected. USDA refers to wholesale prices as “producer prices.” USDA does not require collection of prices at the farmgate (e.g., prices paid to farmers).

* 1. Farmgate prices are the prices producers receive when they sell their products at or near the site of production. Brokers, aggregators, and some wholesalers and other market agents tend to buy from producers. These market agents may then sell products directly to customers, or store, process, or transport the products before selling to customers.
  2. Wholesale prices are intermediary prices paid during transactions among brokers, aggregators and wholesalers. Generally, wholesalers sell in large volumes and charge lower prices than retailers. Wholesalers may specialize in particular commodities (e.g., vegetable oil) or commodity groups (e.g., bulk dry goods). Wholesalers in major market centers are likely to sell in higher volumes than wholesalers in more remote markets.
  3. Retail prices are generally the prices paid by households or individual consumers (i.e., not prices paid by industry, miller, or processor).

Intermediary “wholesale” prices paid during transactions among brokers, aggregators, wholesalers

Retail price

Farmgate price

1. **Commodity characteristics**

The commodity to be monitored and the commodity to be distributed (or made available in a commodity voucher program) should have the same observable characteristics. Sheets 2 and 4 describe how to select which prices to monitor when prices for a single commodity vary by quality, condition, color or size, or source.

* 1. The key characteristics that can cause commodity prices to vary are:
* Quality
  + Often markets contain varying qualities of rice, pulses, etc. Collect prices for the quality of the commodity that will be distributed. For example, collect prices on 20% broken rice, if 20% broken rice is what will be distributed.
* Color / size
  + Some commodities (e.g., rice, maize, beans) vary by color and / or size. Prices may vary by color (e.g., white maize vs. yellow maize) and/or by size (e.g., the length of rice grains).
* Condition / state / processing
  + A commodity’s price can vary based on whether it is dried, husked, polished, or milled, or off the cob. Collect prices for products in a similar condition (e.g., also dried or husked). For example, if the country office (CO) is distributing dried millet, do not collect prices for fresh or raw millet, unless dried millet prices are unavailable.
* Local versus imported
  + Local commodities may differ from imported commodities by condition, quality, or variety. Therefore, use prices for locally produced commodities.
  1. When selecting commodities for cash and voucher programs:
* In cases where vouchers are tied to particular goods, collect prices for those goods.
* A commodity-denominated voucher pilot that distributes a voucher redeemable for a fixed food basket should monitor the prices of foods included in that basket. If the food basket includes more than five commodities, select five key commodities (e.g., cereals or grains, a protein, a fat (e.g., vegetable oil), and other key commodities).
* In cash pilots or cash-denominated voucher pilots, it is not possible to monitor all prices. Select up to five key commodities most heavily consumed by targeted population (e.g., cereals or grains, a protein, a fat (e.g., vegetable oil), and any other key commodities (e.g., milk powder)).
  + Voucher and cash recipients may have the choice of several colors, processing types, or qualities within a given commodity. As discussed below in sheets 2 and 4, select the characteristics for which there is secondary data. If none is available, select the characteristics generally purchased by the target population; if targeting food insecure households, it is likely that the commodity type or quality with a low or the lowest price will be the one to monitor.
  + Similarly, markets in some communities may sell a commodity with one set of characteristics while markets in other communities sell the same commodity with other sets of characteristics. Noting how each commodity differs by market, track each market price, and in central markets, select the commodity characteristics most heavily traded. This is discussed further in sheet 4.

One important step in examining secondary data is to determine whether the commodities with secondary price data have the same characteristics as the commodities that will be distributed or included in a voucher program. If the characteristics do not precisely match, country offices will need to decide whether to rely on secondary data or not. Imprecise matches can be used. However, the country office will need to explain how the characteristics of the commodity reflected in the secondary data differ from the characteristics of the procured commodity. For example, if the secondary data track prices for a commodity that is procured locally (and not imported), is of the same color and size, and is approximately the same quality and processing standards, note the differences, and use the data. In “Sheet 2: Assessing available secondary data,” we discuss how to compare the characteristics of a commodity with in secondary data to the characteristics of a commodity to be distributed.

1. **Volume**

Retailers and wholesalers often offer different prices based on the volume or quantity of purchase. Larger volume purchases tend to have lower per kg prices than smaller volumes. For example, the per kg cost of an one metric ton purchase may be much cheaper than the per kg cost of an one kg purchase.

Collecting consistent price data when prices vary by quantity purchased may be the most difficult component of primary data collection. See “Section 3: Identifying additional primary data to collect” for more information on eliciting prices by volume.

1. **Frequency**

USDA and USAID have slightly different requirements regarding how frequently data must be collected. We have based the technical guidance sheets on the most comprehensive requirement in order to ensure that the data collected across the two programs are as comparable as possible. Frequency requirements are incorporated into the “Regular monitoring of prices” tables below. We recommend that prices are collected at least monthly, but they can be collected more frequently, as described in Sheet 3.

**Next Steps**

Below, we describe which types of prices to collect from each market. We specify where Cornell University (CU) will assist in collecting or will collect data. Each country office will be responsible for collecting the remainder of the data, through primary, secondary or some combination of the two data sources.

**Regular monitoring of prices for LRP pilots: data collection requirements for each commodity monitored**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Wholesale prices** | **Retail prices** | **Frequency** |
| Historic prices | USDA: required – collected by country office (with CU support) | USDA: required – collected by country office (with CU support) | At least monthly (biweekly, if available) – for at least the 24 preceding months, but ideally for 60 months |
| Global market | Collected by CU | Collected by CU | At least monthly: starting at least one month before the program start and running through Sept 2011. |
| National or central markets in source country\*\* | USDA: required | USDA: required (do no harm measures) | One month before, two weeks before, two weeks after procurement. At least monthly thereafter through September 2011 |
| National or central markets in recipient country | USDA: required (do no harm measures) | USDA: required | At least monthly: starting at least one month before the program start and running through Sept 2011. |
| Sample of source markets\*\* | USDA: required | USDA & USAID: required | One month before, two weeks before, two weeks after procurement. At least monthly thereafter through September 2011 |
| Sample of recipient markets | USDA: required | USDA & USAID: required | At least monthly: starting at least one month before the program start and running through Sept 2011. |
| Counterfactuals for source markets\* , \*\* | Required for in-depth evaluations | Required for in-depth evaluations | One month before, two weeks before, two weeks after procurement. At least monthly thereafter through September 2011 |
| Counterfactuals for recipient markets\* | Required for in-depth evaluations | Required for in-depth evaluations | At least monthly: starting at least one month before the program start and running through Sept 2011. |

\* Only needed for in-depth evaluations

\*\* Not needed for cash and voucher programs

While USAID requires less data be collected, we strongly encourage all USAID country office programs to collect data required under USDA as well. This will enable comparisons across pilots and will enable analyses of any impacts of the programs.

Guidance sheet 2 discusses how to evaluate whether available secondary data meet the reporting requirements. Guidance sheet 3 then addresses how to identify what primary data are required, and guidance sheet 4 examines how to collect primary price data.

**Sheet 2: Assessing available secondary data**

Wherever possible, utilize already available secondary data. This will cut down on the time and resources needed to collect primary data and will allow country offices to focus their data collection efforts on locations or on commodities not already covered.

Every country office should explore the availability of price data already collected by governments, international organizations (IOs), and national agricultural research services (NARS). Government institutions, IOs, and NARS may be able to provide two main types of information: (1) price data and (2) the method used to collect these data. Secondary data may be available for wholesale prices, for retail prices, or for both. USDA has requested that both retail and wholesale market prices be monitored. Few data collection agencies collect both wholesale and retail prices. Therefore, some primary data collection will likely be necessary to fill in any gaps.

In order to combine secondary and primary data, the CO needs to collect primary data with the same methods used to collect the secondary data (to the maximum extent possible). This will ensure that the data are comparable.

**Price data collected by a governmental agency or by another agency**

Agricultural ministries, trade ministries, and national statistical offices all may be sources of agricultural price data. Some government data will be available online or through local news media; other data, especially historical data, may only be available in publications or housed on government computers or archives. Search on-line for available databases and for information on data collection methodology and the instruments used for those data. Then, arrange a visit with the data collection agency.

Example of government databases:

* A site hosted by the Norwegian government lists websites for statistical agencies by country for most countries: <http://www.ssb.no/en/links/>
* Bangladesh’s Department of Agricultural Marketing has a searchable database for prices: <http://www.dam.gov.bd/jsp/advancedSearchReport.jsp>
* Benin (French only): <http://www.insae-bj.org/>
* Burkina Faso (French only): <http://www.insd.bf/fr/>
* Niger (French only): <http://www.statniger.org/statistique/plugins/getfilehtml/getfilehtml.php?lng=fr&id=29>
* Pakistan: <http://www.statpak.gov.pk/depts/fbs/statistics/price_statistics/price_statistics.html>
* Uganda: <http://www.countrystat.org/uga/cont/pxwebquery/ma/226ctr015/en>
* Zambia: <http://www.zamstats.gov.zm/index.php> - pdfs located on main page under Agriculture and Environment

Examples of NARS, international organizations, and other data-collecting organizations:

* Consultative Group on International Agricultural Research (CGIAR)
  + Many members of the CGIAR, such as IFPRI, ILRI, WARDA, and ICRISAT, have country offices in pilot countries (e.g., Benin, Mali, Niger, Kenya, Uganda).
  + Speak with an agricultural economist at the local CGIAR country office to determine whether the CGIAR collects any relevant data or if the individual knows where to access secondary data or whom to speak to within the government.
* FoodNet in Uganda is run by the International Institute for Tropical Agriculture (IITA): <http://www.foodnet.cgiar.org/market/market.htm>
* World Food Programme (WFP) country offices: The WFP Market Monitor lists in its appendix the markets covered for each country: <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp227076.pdf>
* Food and Agricultural Organization (FAO) country offices

The agencies listed below aggregate governmental data; data from these agencies may be supplemented with some additional primary data collection (e.g., FEWS NET collects cross-border prices in collaboration with WFP).

* Regional Agricultural Trade Intelligence Network (RATIN) for East Africa: <http://www.ratin.net/priceinfo.asp>
* Famine Early Warning System Network (FEWS NET): <http://www.fews.net/Pages/markettrade.aspx?loc=3&l=en>

**Understanding methods used by governmental or other agencies to collect data**

In cases in which a country office wants to use and build upon existing governmental data or data collected by another agency, the country office should use the same data collection procedure employed by the collecting agency. By doing so, the CO will be able to avoid collecting prices for commodities in locations with existing secondary data, and will be able to combine any new primary data with available secondary data. Rule out any secondary data collected less frequently than monthly.

Below are a series of questions to ask the government ministry or other agency involved in collecting agricultural price data. The objective of speaking with an agency official is to learn precisely how that agency collects agricultural prices, so that the CO can follow the same approach when collecting primary data. Find out how, where and when the data are collected.

Before contacting an agency official, determine whether the agency will make its survey instruments and/or survey methodology available. If so, read those documents first, then answer initial questions below using the documents. Follow up with an official regarding any remaining unanswered questions from below.

Questions to ask:

1. From what markets are these prices collected?
2. Are the prices in the dataset retail prices? Wholesale prices? Farm-gate prices?
3. From whom are these prices collected (e.g., from consumers or traders)?
4. From how many respondents are prices collected in each site in each period?
5. If the respondents are traders, are the reported prices their buying prices or selling prices?
6. For what volume are the prices collected? (e.g., Do retailers report their sale prices per kilogram, per bucket, etc.? Do wholesalers report their sale prices per ton, per 100kg, etc.?)
7. For each commodity price that the CO will track: what are the commodity’s quality, color, size, and condition? Do respondents in the secondary surveys seem to have a uniform understanding of this grade within this market? Across towns or sites?
   1. Characteristics of commodities with secondary data do not have to precisely match all of the characteristics of commodities to be procured but should be as close as possible. A CO will need to decide if it is preferable to expend time and resources collecting information on the “correct” commodity or if the commodity with the secondary data is similar enough that it can serve as a “proxy.”
   2. For example, consumers treat white and yellow maize as relatively different goods and therefore one should not be treated as the proxy for the other. Yet, there are innumerable varieties of beans and rice and treating a rice variety or bean variety as a proxy for another is most likely fine. It is likely that the price differences and price fluctuations across varieties are relatively minor in these two cases because both the commodity tracked by the secondary data and the procured commodity will almost certainly be popular, inexpensive varieties.
8. How frequently are prices collected from each market each month? What time(s) of month are these prices collected?
9. Are the published prices the prices for a given day or are they an average over a block of time? If they are an average, how is the average calculated (e.g., is the average weighted or unweighted? Is the mean arithmetic or geometric)?
   1. Either approach is fine. If an average is used, the country office should understand precisely how that average is calculated and be able to replicate the data collection process. Cornell can assist with replicating the computation if an average is used.
10. Are published prices averages across traders within a market? If so, can the agency make available to you the original, per-trader price reports?
11. Does the approach to collecting commodity prices vary by market or region? If so, how does it vary?
12. How quickly can the secondary data be made available to the county office?
    1. Consider offering to make your pilot’s data available to the secondary data collector.
    2. Data are needed for monitoring and evaluation. Monitoring is time sensitive, so if a country office is heavily reliant on secondary data for monitoring, the timeliness of data availability may become very important. It is likely that country offices will have to wait at least a few weeks for price data to be released.
    3. Country offices completely reliant on secondary data may need access to that secondary data more urgently than those collecting some primary data. A country office that is not collecting primary data but is expecting to wait longer than a month for secondary data to be released may also want to collect some primary data for monitoring purposes.
13. How many months back does available data go? If data are compatible with a country office’s needs, acquiring at least 24 months, and ideally 60 months, of historical data, will assist analysts by allowing for better control for variables such as seasonality, fuel prices, and global market conditions.

During an interview with someone knowledgeable about the collection of secondary data for each commodity: (1) generate a list of all markets where data collection occurs for the commodities to be monitored, and (2) fill in the below chart. If both retail and wholesale data are available as secondary data, a CO should collect information on both types of prices for each commodity.

**Tracking secondary price data collection processes by commodity**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Type of price** | **Number of respondents in each market?** | **Buying or selling price?** | **Purchase volumes of prices reported?** | **Commodity quality and condition?** | **Commodity color and/or size?** | **Number of times data collected per month?** | **Within each month, on what day are prices collected?** | **Are the prices averages across traders and / or time? If so, explain calculation.** |
| *Example:*  *Commodity 1: Maize* | *Example: Wholesale* | *Example:*  *5* | *Examples: Selling* | *Example: 90kg bag* | *Example:*  *Dried maize in grain form* | *Example: White maize* | *Example: Two times* | *Example:*  *The first and third Monday of every month* | *Example:*  *No – each price is reported separately.* |
| Commodity 1: \_\_\_\_\_\_\_\_ | Retail |  |  |  |  |  |  |  |  |
| Commodity 1: \_\_\_\_\_\_\_\_ | Wholesale |  |  |  |  |  |  |  |  |
| Commodity 2: \_\_\_\_\_\_\_\_ | Retail |  |  |  |  |  |  |  |  |
| Commodity 2: \_\_\_\_\_\_\_\_ | Wholesale |  |  |  |  |  |  |  |  |
| Commodity 3:\_\_\_\_\_\_\_\_\_ | Retail |  |  |  |  |  |  |  |  |
| Commodity 3:\_\_\_\_\_\_\_\_\_ | Wholesale |  |  |  |  |  |  |  |  |

The italicized first row shows an example of how an agency collects wholesale maize prices. In this example, to collect maize prices in a source market not covered by secondary data collection, a CO could speak to five wholesalers about their selling price for dried granular maize. Prices should be collected per 90kg bag. Prices should be collected two times each month, preferably during the first and third weeks of each month. Matching the exact timing of data collection is less important than matching the exact commodity (e.g., same quality or standard), the exact purchase volumes, and the exact types of respondents. A country office could replicate this data collection approach in other areas or for other commodities for which secondary data are not available.

**Are the data similar to what the country office needs?**

After speaking with the secondary data collector, the country office should know how, where, and when the data are collected for each commodity for which secondary price data exist. When relying on secondary data for comparison, the most important criterion is that the characteristics of the commodity with secondary data must be sufficiently similar to the procured commodity’s characteristics. Second, the type of prices collected in the secondary data must be clearly definable as retail or wholesale. Third, prices for primary data should be collected for the same per unit scale or volume (e.g., in tons, kilograms, bags) as the secondary price data. Fourth, the CO should match the timing of price collection with the secondary data as prices can vary greatly within the span of a month.

Before relying on secondary data, verify:

1. Is the commodity to be procured really the same as the commodity with secondary price data? If already available price data do not meet the same commodity characteristics, it may still be possible to use the secondary data as a proxy price series.
   1. If the characteristics do not precisely match, country offices will need to decide whether to rely on secondary data or not. Minor variations by quality, color or size are fine. If a CO decides to rely on imprecise matches, the country office will need to explain how the characteristics of the commodity with secondary data differ from the characteristics of the procured commodity.
2. Are the secondary data collected from retailers, wholesalers or both? Does the CO have the same definition of “retailer” and “wholesaler” as the collector of secondary data?
3. Is the unit of measure / price per volume by type of trader clearly understood? Prices need to be collected in a manner that exactly determines the price per weight or price per volume (this is discussed in greater detail below).
4. At what point(s) in each month are secondary data collected? Secondary data collected less frequently than monthly is not usable. The timing of additional data collection should match the timing of the secondary data collection.

After gathering information on available secondary data, a CO should combine this information with information in the next section to determine what price data are missing and therefore need to be included in primary data collection efforts. **Sheet 3: Identifying additional primary data to collect**

In order to assess whether / how much of the secondary data meets a CO’s reporting requirements, a CO will need (1) to ensure that the secondary data collection process is well understood and the data are usable (2) to understand for what markets and what commodities are secondary data available and (3) to compare the available secondary data against the CO’s data needs.

Summarizing the previous guidance sheet, the first step in using secondary data is to:

1. Check commodity characteristics are the same (or very similar)
2. Confirm that secondary prices are clearly identifiable as retail or wholesale and that you understand the definitions used by the collecting agency for each.
3. Understand the sales units or volumes used for different trader types
4. Ensure the timing of primary price collection will be similar to when secondary data are collected

After verifying that the secondary data are usable, the second step is to prepare a list of all markets with secondary data. After, prepare a list of candidate markets to monitor by each market type, including distribution communities, all source markets, and major regional or central markets. Then, within each market type, determine whether any candidate markets overlap with secondary data for any commodities. In cases of overlap, it is not necessary to collect primary data.

Common errors of combining secondary and primary data include:

* Comparing retail series in one market against wholesale series in another
* Comparing raw commodity prices (e.g., paddy, granular maize) with processed products made from those commodities (e.g., polished rice, maize meal)
* Failing to convert prices to a common currency and to a common physical unit of account (e.g., tons) so that the prices are expressed identically (e.g., US$/metric ton)
* Using different frequency data – e.g., monthly from one place, weekly from another – and not matching up periods correctly
* Being unclear as to whether the price series are day-specific observations (i.e., whether a market enumerator recorded a particular price on a given day or the average of multiple observations on a particular day) or period averages (i.e., the mean of daily observations over a period).

For most pilots, it is not feasible to monitor all distribution markets or all source markets. Therefore, we take a “sentinel site” approach, in which a core set of markets is monitored over time. Sentinel sites are selected to be representative of communities, as discussed below. The exact number of markets to monitor will depend on the specifics of each pilot. For example, pilots using competitive tenders or local procurement (meaning the recipient and source countries are the same) will need to monitor fewer markets than pilots using non-competitive tendering or regional procurement.

|  |  |  |
| --- | --- | --- |
| **Market Category** | **Limited-competitive procurement:** | **Competitive and noncompetitive procurement, vouchers and cash:** |
| National or central markets in source country | Up to 5 | Up to 5 |
| National or central markets in recipient country | Up to 5 | Up to 5 |
| Sample of source markets | Up to 5 | None |
| Sample of recipient markets | Up to 5 | Up to 5 |
| Counterfactuals for source markets\* | Up to 5 | None |
| Counterfactuals for recipient markets\* | Up to 5 | Up to 5 |

\*Some pilots will not have counterfactuals.

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| Powerpoint: 7 Market Data – Market Selection describes the total number of markets to monitor based on the type or procurement (non-competitive, competitive, limited competitive, or cash and voucher) |

Some communities will have more than one market. Therefore, monitor the main consumer market in each of the selected communities.

**Selecting central markets in the source country – for competitive, limited competitive, and non-competitive procurement**

1. Compile a list of up to 5 major or central markets in the source country. This list should include a combination of the following:
   1. A central consumer market in the capital city
   2. Major import/export market
      1. Could be a site of heavy cross-border trade or a major port
      2. May be the same as one of the above major market centers
   3. Largest market(s) in the area where procurement is most likely to occur
      1. For limited-competitive tenders, the procurement location is likely to be known. Select at least the largest market in each region where procurement will occur.
      2. For competitive and non-competitive procurement the original source of the product may not be easily known. Therefore, track markets that are major trading centers. Tracking smaller source markets (discussed below) is not necessary.
   4. Other central consumer markets in urban or regional centers
      1. Select up to 2

**Selecting central markets in the recipient country**

1. Compile a list of up to 5 major or central markets in the recipient country. This list should include a combination of the following:
   1. A central consumer market in the capital city
   2. Major import/export market
      1. Could be a site of heavy cross border trade or a major port.
      2. May be the same as one of the above major market centers
   3. Largest market(s) in each distribution area.
   4. Other central consumer markets in urban centers
      1. Select up to 2

**Selecting central markets where the same country is both the source and recipient**

1. In pilots where the recipient and source countries are the same, several central markets will overlap. Select a total of five markets based on the descriptions above:
   1. A central consumer market in the capital city
   2. Largest market(s) in each distribution area
   3. Largest market(s) in each source area
   4. Major import / export market
   5. If possible, consumer market in major urban area

**Comparing selected central markets with secondary central markets**

1. If secondary data are available, use the approach detailed in “Sheet 2: Assessing available secondary price data” to determine:
   1. Whether the secondary data cover the right commodities or commodities that can serve as proxies.
   2. If so, whether the secondary data include retail and/or wholesale prices.
2. Compare the list of markets with secondary data to the list of central markets in the recipient and source countries.
3. In cases where source markets overlap with markets with secondary data or where recipient markets overlap with markets with secondary data, use the secondary data to conserve time and resources.

**Selecting source (or procurement) markets**

1. For competitive procurement, non-competitive procurement and vouchers and cash:
   1. Traders responding to competitive tenders will almost certainly be operating in major central markets. By monitoring central markets, we will capture competitive prices. Therefore, it is unnecessary to monitor additional source markets outside of central markets or to trace the source locations used by traders.
   2. Similarly, for non-competitive procurement, vendors may not be able to readily identify the locations from which their product was sourced. Therefore, it is unnecessary to monitor additional source markets outside of central markets or to trace the source locations used by traders.
   3. For cash and voucher programs, it is exceedingly difficult to identify the source locations of commodities sold in recipient locations due to long or complex supply chains, storage, and mixing of commodities from different sources by upstream sellers. Therefore, for cash or voucher programs, it is unnecessary to monitor additional source markets outside of central markets or to trace the source locations used by traders.
2. For limited competitive procurement:
3. Monitor the same set of markets for all commodities sourced using limited competitive approaches (e.g., the procurement has development objectives or is limited to a subset of vendors). If different commodities are sourced using limited competitive approaches from different markets, repeat the below process for each commodity.
4. List all likely source markets in column 1 in the table below. These markets will be locations where likely participants in the tendering process usually sell their commodities.
5. Compare this list to the list of markets covered by secondary data.
6. By commodity, mark whether secondary retail and wholesale price data exist for each source market in columns 2 and 3 in the table below. It may be that no secondary data exist for the source markets where procurement will occur.
7. The selection of source markets to monitor should be based on a country office’s knowledge about these communities and the local context.
8. In some limited competitive procurements, a CO will know precisely which communities it intends to source from. For these procurements, select which communities to monitor based on remoteness. In other limited competitive procurements, a CO may only know the district or region it plans to source from. Or, it may pre-qualify a large number of vendors but ultimately may source from only a subset of these vendors. For these procurements, select markets based on probability of procurement.
9. Pilots with known procurement sites: To select sentinel site source markets, begin by assessing their remoteness.
10. Remoteness is a proxy indicator for spatial integration. In other words, how well are remote communities connected to distant, larger markets? Roughly, the more remote a community is, the more difficult and costly it is to link with other markets, and the greater risk that a procurement or distribution could result in price variability.
11. Choose a remoteness indicator based on either access to paved roads or access to a daily market. Use the same indicator across all markets. Then, categorize markets as either “remote” or “less remote.”
12. Because remoteness is a relative, context-specific concept, in some places being ten miles from a paved road or daily market is considered remote, while in others, being 50 miles from a paved road or daily market is considered remote.
13. Pilots with known procurement sites: For each source market, tick either column 4 or 5 to indicate those that are remote (column 4) or those that are less-remote or not remote (column 5).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Secondary wholesale price data available? | Secondary retail price data available? | Remote? | Less Remote? | Likelihood of sourcing? |
| Source Market 1 |  |  |  |  |  |
| Source Market 2 |  |  |  |  |  |
| Source Market 3 |  |  |  |  |  |
| … |  |  |  |  |  |

1. Pilots with known procurement sites: The country office should select up to five source markets, at least two of which should be in remote areas. Both retail and wholesale data will need to be monitored.
2. Pilots with known procurement sites: If secondary data are available for any source markets (as reflected in columns 2 and 3), randomly select from these markets 2-3 remote markets and 2-3 non-remote markets.
3. Even if secondary data are available for only a few markets or only for wholesale or retail prices, still select from markets with secondary data first. In markets where secondary data on wholesale prices exist but retail prices do not, plan to monitor retail prices, and vice versa.
4. From the remaining markets on your list (i.e., those for which no secondary data are available), select the required number of remote and less remote markets (as reflected in columns 4 and 5) in order to reach 2-3 of each type for a total of 5.
5. Pilots with known procurement sites: If no secondary data are available for any market, randomly select 2-3 remote market (using column 4) and 2-3 less-remote markets (using column 5).
6. Pilots with uncertain procurement sites or vendors: Rank procurement sites by probability of procurement. Compare the five markets most likely to be sources against secondary data list. Collect primary data for any of these five markets that do not have secondary data (using column 6).

After the selection process has been completed, five limited competitive source markets should have been selected:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Remote markets | Less remote markets | Most likely procurement sources |
| Limited competitive source markets with known procurement sites | 2 – 3 markets | 2 – 3 markets | 0 |
| Limited competitive source markets with unknown procurement sites | 0 | 0 | Top 5 markets based on probability of procurement |
| Competitive, non competitive, cash and voucher source markets | 0 | 0 | 0 |

**Selecting recipient (or destination) communities – for all pilots**

1. List all communities eligible for distribution. For each commodity, note which communities have data available for wholesale and/or retail prices.
2. Divide communities into remote and less remote. As with source markets, remoteness acts as a proxy for market integration and will be context dependent. The division between remote and less remote for recipient communities may differ from the division between remote and less remote for source communities because of differing contexts.
3. From the list of recipient communities with secondary data, if any, identify 2-3 communities that are remote and 2-3 that are less remote.
4. If there is an inadequate number of communities with secondary data for either the remote or less remote category, randomly select additional recipient communities for primary data collection until there are 2-3 remote and 2-3 less remote communities with either secondary or primary data.
5. For each community, monitor the main consumer market.

|  |  |  |
| --- | --- | --- |
|  | Remote communities | Less remote communities |
| Recipient communities | 2-3 communities | 2-3 communities |

**Selecting counterfactual source markets, if applicable**

1. Counterfactual source markets are only required in pilots with an in-depth evaluation component that are engaging in limited competitive procurement.
2. In general, counterfactual communities should not have other agency programs or projects in place. If they do, it will be difficult to disentangle whether price differences between the pilot and these communities are attributable to the LRP pilot or to other agency interventions. One exception is where the recipient and source communities are the same and a pilot has been matched to a series of communities receiving transoceanic food aid.
3. Using available secondary data, identify up to five markets that share the following attributes with the five LRP source market(s):
   1. They have similar agro-ecological zones;
   2. They have roughly the same population; and
   3. They are the same distance to a paved road; or
   4. They have the same level of access to a primary (daily or weekly) market.
4. Primary data collection will be necessary if it is not possible to identify a match for each of the five source markets in the secondary data. Ask field staff or other knowledgeable individuals for recommendations of neighboring regions or regions in the same agro-ecological zone with characteristics matching the source markets. Suitable counterfactual markets will have very specific attributes, and therefore it is unlikely that secondary data will exist for all of them.

**Selecting counterfactual recipient communities, if applicable**

1. Counterfactual recipient communities receive transoceanic food aid.
2. Identify up to five communities with similar agroecological zones, approximately the same population, and the same distance to a paved road, or the same access to a primary (daily or weekly) market as the selected recipient markets. These communities should have similar interventions as the matched recipient communities.
3. Follow the same approach described above to determine whether secondary data exist for these communities. If data do not exist, primary data collection will be necessary.

**Market Data – Market Selection List**

**National or Central Markets**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | *Commodity 1* | *Commodity 2* | *Commodity 3* | *Commodity 4* | *Commodity 5* |
| *(Capital Market)* |  |  |  |  |  |
| *(Largest Market in the Area of Purchase or Distribution)* |  |  |  |  |  |
| *(Largest Market in the Area of Purchase or Distribution)* |  |  |  |  |  |
| *(Import/Export Market)* |  |  |  |  |  |
| *Additional urban market or market in the area of purchase or distribution* |  |  |  |  |  |

**Recipient Markets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Name of Commodity*** | *Wholesale Secondary Price Data Available?* | *Retail Secondary Price Data Available?* | *Remote?* | *Less Remote?* |
| *Recipient Market 1* |  |  |  |  |
| *Recipient Market 2* |  |  |  |  |
| *Recipient Market 3* |  |  |  |  |
| *Recipient Market 4* |  |  |  |  |
| *Recipient Market 5* |  |  |  |  |

**Source Markets – Limited-competitive purchases (per commodity)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Name of Commodity*** | *Wholesale Secondary Price Data Available?* | *Retail Secondary Price Data Available?* | *Remote?* | *Less Remote?* | *Likelihood of sourcing?* |
| *Source Market 1* |  |  |  |  |  |
| *Source Market 2* |  |  |  |  |  |
| *Source Market 3* |  |  |  |  |  |
| *Source Market 4* |  |  |  |  |  |
| *Source Market 5* |  |  |  |  |  |

**Selecting traders**

After identifying which markets to visit for primary data collection, the country office’s enumerators will also need to sample retail and wholesale traders within each market .

Over time, the objective is to collect sales prices from 5 retailers and 5 wholesalers per commodity in each market monitored.

* In first period, interview up to 10 retailers and up to 10 wholesalers for each commodity in each market. There may be some attrition. Initial over-sampling means future data can be collected by cell phone, even if one or more traders drop out.
* In second period, interview 5 of each type of trader. The remaining five traders are in a “reserve pool.” If one or more of these 5 traders are not available, interview from the reserve pool. Each trader should be asked for sales prices for all monitored commodities.
* In subsequent periods, rank traders by frequency of response. Interview whichever 5 traders have already responded most frequently; if one or more is unavailable, interview the next-most frequent respondent.

Return to the market to sample additional traders when it is not possible to get at least five responses from the set of ten initially interviewed.

* If there are fewer traders in that market than the initial ten, census (i.e., interview) all traders in that market. For example, some communities’ markets are too small or remote to support many traders or may only have a few wholesalers, some of whom may be based outside the community.

**Number of trader informants per market per commodity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Initial**  **Interview**  **Wholesalers** | **Initial Interview Retailers** | **Repeat Interview**  **Wholesalers** | **Repeat Interview**  **Retailers** |
| Central markets in source country | 10 | 10 | 5 | 5 |
| Central markets in recipient country | 10 | 10 | 5 | 5 |
| Sample of source markets | Up to 10 | Up to 10 | Up to 5 | Up to 5 |
| Sample of recipient markets | Up to 10 | Up to 10 | Up to 5 | Up to 5 |
| Counterfactuals for source markets\* | Up to 10 | Up to 10 | Up to 5 | Up to 5 |
| Counterfactuals for recipient markets\* | Up to 10 | Up to 10 | Up to 5 | Up to 5 |

\*Pilots without an in-depth component will not need to interview traders in counterfactual markets

**Randomly selecting traders to interview:**

Enumerators should randomly select traders using the process outlined below, and then interview the same traders throughout future data collection.

1. Identify the approximate center of the market (or of the community if shops are dispersed across the community and there is no market center).
2. For markets arranged along a single street: Flip a coin; walk to your right if you get heads; to your left if you get tails
3. For vendors arranged around a market center: Spin a pen on a flat surface; you will walk in the direction that the pen-tip points
4. Spin a pen on a flat surface. The direction that the pen-tip points indicates the direction to walk.
5. Either by asking those nearby or by walking to the edge of the market, approximate how long it would take to walk from the center of the market to the edge of the market (or the edge of the community).
6. Cut a piece of paper into ten slips of the same length. On each slip write a single interval in 10% increments (i.e., 10%, 20%, 30%, etc. up to 100%). Place all the slips in a bag. Randomly select on slip. Walk this approximate percent distance toward the edge of the market. For example, if 30% is the interval selected, walk a bit less than one-third of the way to the edge of the market from the center.
7. After walking in the correct direction for the approximate distance, select the first trader reached in that vicinity.
8. Ask that trader whether she or he sells any of the commodities to be monitored. If not, select a neighboring trader who does sell the commodities.
9. If a trader sells several of the commodities to be monitored, interview this trader about **all** relevant commodities sold.
10. If a wholesaler also sells commodities at retail prices, interview the wholesaler about his/her wholesale and retail businesses.
11. Record the respondent’s cell phone numbers for arranging follow up visits or calls. Contact information is included in the template price collection survey.
12. It may be necessary to interview more than five of each trader type in each market. Some traders, particularly wholesalers, may only sell a subset of the monitored commodities. However, they may sell products for both wholesale and retail prices. Both series should be recorded.
    1. After the initial interview, each commodity should have five wholesale price points and five retail price points per period from each market (assuming at least that many traders are operating). Therefore, if a sampled trader only sells two of the three commodities to monitor, survey this trader about the products she or he sells, and sample an additional trader to collect prices on the commodity(ies) not sold by the previous trader.
    2. For example, if a sampled wholesaler sells only dry goods but not vegetable oil, and vegetable oil is one of the monitored commodities, it will be necessary to sample another wholesaler who sells vegetable oil.
13. After completing an interview, return to the center of the market and repeat the survey process until the correct number of retailers and wholesalers per commodity is reached.

**Selecting frequency**

1. If secondary data are available:
   1. Collect primary data at the frequency of the secondary data (i.e., at least monthly).
   2. If secondary data are collected weekly or biweekly, try to collect primary data for the same frequency, on the same days.
   3. If secondary data are collected daily, select certain days of secondary data each month and collect primary data on those days as well (e.g., on the first and third Wednesdays of each month).
   4. Collecting primary data more frequently than available secondary data may be helpful for monitoring, but it will not be helpful for evaluation.
2. If secondary data are not available:
   1. Collect primary data at least monthly. If feasible, consider collecting primary data biweekly.
   2. Collect prices from procurement sites two weeks before procurement and two weeks after for all central and regional markets monitored. In addition, for limited competitive procurement, collect prices from source markets.

**Collecting data from traders over time**

1. If you have established communication with a core group of informants in a market, it may be possible to follow up with them via phone and SMS for the regular (e.g., monthly or biweekly) reporting of prices.
2. Provide some air-time to all traders to induce them to have their cell phones ready for follow-up surveys.
3. Whenever possible, track the same traders each period so that the consistency and comparability of the data across time is maximized.
   1. Collect cell-phone numbers of traders to assist in maintaining communication with them.
   2. Replace unavailable trader with one from the reserve pool.
   3. In future periods, follow up with whichever traders have responded most frequently in previous periods, drawing from reserve pool to reach 5 traders per period.
4. Enumerators should still plan visit these markets occasionally. Market visits can alert enumerators to any issues that may not be reported by traders. Similarly, face-to-face interactions can build rapport, which can improve survey quality.

**Sheet 4: Approaches to primary data collection**

Most country offices are very familiar with data collection processes. The information below is intended to complement CO training on data collection by highlighting specific issues that may arise when collecting price data from traders.

**Before going to the field, an enumerator should have the following:**

1. Some experience or practice in price collection, perhaps in a market near the country office
2. A clear understanding of each commodity’s characteristics
   1. A procurement officer may want to provide a sample of each commodity that the enumerators can bring with them to markets. This practice can be especially valuable where local names of varieties vary among communities.
3. A clear understanding of how to randomly sample retailers and wholesalers within each market
4. A definition sheet of key terms or commodity names, possibly in the local language
5. A list of markets to visit, with information on the days on which each market is open
6. A scale for measuring retail amounts of commodities (e.g., a scale that is capable of measuring up to five kilograms, such as a kitchen scale)
7. If liquids are to be procured, a standard measuring cup for liquids that can hold at least 2 liters
8. A calculator
9. An adequate number of surveys, plus a few extra
10. Ten slips of paper, numbered 10% through 100%, in a bag
11. Clipboard, pens
12. Some cash for purchasing commodities (some traders may not allow an enumerator to measure their products unless she or he purchases them)
13. Possibly a small amount of cash to provide to each trader for air-time for next period’s data collection
14. The contact information of the country office monitoring and evaluation officer in case any issues arise.

**Interviewing retailers and wholesalers**

We need to collect information on commodities identical to (or most similar to) commodities that will be distributed / monitored. If you are unsure whether the monitored commodity is available in this market, speak to 3-4 key informants to determine whether the exact commodity is available. Then, select only traders selling the commodities of interest. For example, if white maize and yellow maize are sold and you intend to distribute yellow maize, speak with vendors about yellow maize only.

The initial survey with each trader will require more time because it involves registering a trader, and in the case of retailers, weighing their products. Repeat surveys are shorter and can be completed by phone.

**Eliciting commodity-specific information**

1. In a few cases, commodity characteristics of the distributed product may not match characteristics of a commodity for sale in a monitored market.
2. Fortified or processed commodities are not generally sold directly to household or individual purchasers.
   1. Many fortified products (e.g., corn soy blend, high-energy protein supplements, or fortified cereal bars) are not directly sold to households or individuals, but are sold to distributing agencies or institutions. It is not possible to track retail or wholesale prices for these products.
   2. For blended foods, collect prices of the three main food ingredients used to produce the fortified products, by cost.
   3. Fortified products may include supplements or fortificants, which are expensive and are not often sold directly to households. Generally, there are no retail price series data for these fortificants and it will not be possible to track price series for them.
3. Fortified vegetable oil
   1. If the distributed oil is branded, track prices for that specific brand.
   2. If fortified oil is not available on the market, track the price for unfortified oil and note quality differences or other differences.
4. Commodities procured in small lots or through non-competitive tenders:
   1. The characteristics of commodities procured in small lots from farmer groups, cooperatives or associations may vary among farmer groups or across communities.
      1. For example, bean or cowpea varieties may differ among communities.
   2. If no traders in the market sell the same commodity that will be distributed, ask traders for prices on the commodity with characteristics closest to the distributed commodity
      1. Showing a sample or photo of the distributed commodity can help traders identify which characteristics are most similar
   3. In cases where varieties vary, take a sample of the varieties from each of your source communities (or photos of the commodities) to a central market. Identify which variety is most heavily traded in the central market. Use this variety in your trader surveys across all central markets and counterfactuals, if applicable.
      1. Note which varieties are tracked in central markets, and which varieties are not.
      2. This information will help us identify whether price differences between communities are due to differences in varieties or differences in responses to pilot interventions.

**Interviewing retailers: using scales**

1. Regardless of whether a retailer uses a scale or a volume measure, always use a scale from the country office to measure the commodity so that the calibration and equipment are the same across sampled traders. Note that a trader may not be willing to allow an enumerator to touch the commodity without purchasing it. Therefore, enumerators may need to purchase some commodities during the first interview to determine the unit of measure (e.g., vegetable oil).
2. Once a trader’s standard unit of sale has been weighed by an enumerator, it does not need to be weighed again, unless that unit of sale changes to a new type of unit. The survey template includes a question about whether a unit of sale has changed since the last interview.
3. When interviewing retailers for the first time:
   1. Zero the appropriate scale before interviewing each retailer.
   2. Ask what the trader’s usual unit or volume of sales is for each commodity. Record the unit of measure by name.
      1. Retailers may sell products by the “cup,” “jerrycan,” or other local measure, or may sell by the kilogram. These units will most likely be measured with a trader’s own scales, which may not be calibrated across traders.
      2. The unit – a jerrycan for example – may look the same across traders. However, the volume measures may differ slightly across traders (e.g,. due to dents in cans). Because we need prices per unit to be converted into prices per kilogram, we need to know the true weight of the various units.
   3. Ask the trader to give you one unit.
      1. Weigh this unit. If it is below two kilograms, ask the trader to give you an additional unit. Weigh again. If the two units are still below two kilograms, ask for an additional unit, and so on, until the scale reads at least two kilograms.
      2. We want measures in at least two kilogram quantities in order to decrease the magnitude of measurement error.
      3. Record the number of units required to reach at least two kilograms. Record the scale’s exact reading of the weight.
      4. Follow a similar approach for liquids, using a standard 2- liter measuring cup to measure out at least one liter.
   4. Ask the price for this unit or volume of commodity.
   5. Record the price per unit.
   6. Optional: with a calculator, compute the price per kilogram (by multiplying the price per unit times the number of units weighed. Divide by the measured weight from the scale). The per-kg price will be useful for comparing prices across retailers and for identifying any possible outlying prices.
   7. Once a trader’s standard unit of sale has been weighed by an enumerator, it does not need to be weighed again.
      1. If a trader replaces a unit of measurement or switches to a different unit of measurement, the new unit should be used to collect the commodity, which should then be weighed with the CO scale.
      2. If collecting information by phone, do not collect price data for any commodities that have a new unit of sale until you can measure the new unit. Instead, ask a reserve pool respondent about those commodities.

**Interviewing wholesalers**

1. When interviewing wholesalers for the first time:
   1. Note that some wholesalers also have a retail business. These wholesalers often charge one price per kg for larger volume wholesale purchases and another price per kg for smaller retail sales.
   2. We are interested in both their wholesale prices and their retail prices. The enumerator must be clear about whether he or she asking the trader for the wholesale price or the retail price and note this on the survey
   3. For the retail business: measure the unit of sale as discussed above.
   4. For the wholesale business: Ask what the trader’s usual unit or volume of sales is for each commodity for his or her wholesale business. Do not weigh this product.
      1. Many wholesalers sell products by the 90kg or 100 kg bag and most use their own scales
   5. Record the unit of measure by name.
   6. Ask what the price is for this unit or volume of commodity.
   7. Record the price per unit.
   8. Optional: With a calculator, compute the price per kilogram (by dividing the reported price per unit by the measured weight). The per-kg price will be useful for comparing prices across wholesalers and for identifying any possible outlying prices.
   9. In future interviews, verify that the wholesaler is still using the same unit of sale. Record the new name and weight/volume, if this unit changes.

**Interviewing market managers**

In some markets, a market manager or market monitor is employed. If a market being monitored has a market manager, consider adding the manager as key informant. The manager should not replace the five wholesalers and five retailers interviewed but can complement them as a sixth respondent. We don’t want to rely exclusively on market managers or on using posted prices because we want to learn directly from each trader about his or her business.

* Record who sets the price (e.g., commodity exchange, government agency).
* Record who reports the price (e.g., market monitor).
* Record the date when price posting was introduced.

**Before going to the field, an enumerator should know the answers to the following questions.** The first eight questions are discussed in earlier technical guidance sheets. The remaining questions are issues that may arise in some situations, but not all.

1. What days of the week or month do your target markets operate?
2. What are the characteristics of the commodities to be monitored?
3. Who are retailers? Who are wholesalers? How are they different?
4. How should an enumerator select a trader to interview?
5. How do you use a scale?
6. When interviewing retailers, at what volumes should prices be collected?
7. When interviewing wholesalers, at what volumes should prices be collected?
8. When interviewing wholesalers who also have a retail business, should both sets of prices be collected?
9. How frequently should prices be collected?
10. When are the market’s busy times?
    1. Time your visits to avoid the busiest times, when traders would be disinclined to disrupt their business to answer questions.
11. What if a trader does not sell a particular commodity or does sell it but is unable to provide a current price?
    1. Note down whether the trader does or does not usually sell the product. If the trader usually sells the product but does not know current prices, ask why and note down the response. Interview the trader about commodities she or he does trade in. Select another trader to interview about the particular commodity not traded by the original respondent.
12. What if more than one trader is unable to provide a price for a particular commodity type or variety?
    1. Request information on the commodity type or variety most likely to be used by locals as a substitute in their diet. For example, substitute in one variety of lentils for another. However, do not substitute an entirely different class of legumes, such as beans, in place of lentils. Note how the substitute commodity differs from the procured commodity with regard quality, type, color or other characteristics.
13. What if there are not enough wholesalers or retailers in a community?
14. Interview up to five wholesalers and up to five retailers for each commodity. In small or remote communities, there may only be a few of each trader type (or no wholesalers at all), so interview those who are available.
15. If a wholesaler also has a retail business, interview the wholesaler about both retail and wholesale prices.
16. What if prices are reached through bargaining?
17. If a trader normally bargains with sellers, request that the trader supply his or her “average” selling price.
18. When returning to a market, who should be interviewed?
19. When possible, interview the same traders selected the previous period.
20. Once a relationship is established, this can be done by phone or SMS.
21. If a trader formerly interviewed is not available or is unwilling, who should an enumerator interview?
22. If a trader is not available, select another trader of the same type (retailer or wholesaler) who sells the commodity of interest. Note the change of trader on the survey.
23. The next period, interview whichever trader has been interviewed most often.

**Before leaving the field, an enumerator should do the following data checks:**

1. Are there any missing values? Or, are any responses unclear or vague?
   1. If so, the enumerator should try to clarify responses with traders before departing the field.
2. Optional: for each market, check for consistency of commodity prices within a trader type within each market.
   1. After collecting price information for a commodity from up to five wholesalers, convert each price into the same per-unit price.
   2. Examine wholesale prices separately from retail prices. Expect that prices will vary somewhat across each trader type.
   3. Rule of thumb: Investigate when a single per unit price (within each trader type and commodity) is two or three times larger or smaller than the other prices.
      1. What could be causing these differences?
      2. First, check that the conversion was done correctly.
      3. Second, rule out reporting error by asking the respondent with the outlying price to report his or her price again. Be sure that the trader understands that you are requesting either retail or wholesale prices.

**Data checks during data entry**

1. Enter data into the database (to be developed)
2. Check for missing values. If any values are missing, ask the enumerators why these prices were not available.
3. Enter prices into the appropriate spreadsheet or database and graph each commodity’s prices across markets over time.
   1. Is one price much higher or lower than the other prices? Check that the price has been correctly converted to price/kg. Then, verify that the reported price is the correct price, possibly by calling a key informant from the market. If the price is correct, examine other commodity prices for that market. Are they also very different from prices in other markets or is it just this one price that is different?
   2. The analysis of price data will be discussed in future guidance sheets.
4. Graph each market’s prices for all commodity monitored in this market.
   1. Is the current period’s price much higher or lower than earlier periods? Verify that data entry errors or price/kg conversion errors occurred. Then, verify that the reported price is the correct price. If it is the correct price, research whether the price for this commodity is higher in other markets.
   2. How to analyze price data will be discussed in future guidance sheets.

**Analysis**

Once comparable data has been compiled, a range of tools – with various levels of complexity –can be applied to analyze the series. Data analysis will be discussed in future guidance sheets.

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